

WHAT IS CLAIMED IS:

1. A vehicular alternator comprising a rotor and a stator constituted by coiling stator windings over a stator core, said rotor comprising a pair of claw-type magnetic poles arranged in an opposed relation, a permanent magnet disposed between adjacent two of a plurality of claws provided on said pair of claw-type magnetic poles, and field windings coiled radially inward of said plurality of claws,

wherein each of said plurality of claws of said rotor is formed to have a shape coming into contact with the whole of a magnetic pole surface of said permanent magnet.

2. A vehicular alternator according to Claim 1, wherein each of said plurality of claws has an auxiliary magnetic pole portion contacting the whole of the magnetic pole surface of said permanent magnet.

3. A vehicular alternator according to Claim 2, wherein said auxiliary magnetic pole portion is formed to have a greater width on the outer side in the radial direction of said rotor than on the inner side in the radial direction of the rotor.

4. A vehicular alternator according to Claim 1, wherein each of said plurality of claws is formed such that an inner surface of each claw in the radial direction of said rotor is substantially parallel to an outer surface

thereof in the radial direction of said rotor.

5. A vehicular alternator according to Claim 4, wherein said plurality of claws are interconnected by a substantially ring-shaped coupling member.

6. A vehicular alternator according to any one of Claims 1 to 5, wherein each of said plurality of claws has a magnet holding portion for holding said permanent magnet.

7. A vehicular alternator comprising a rotor and a stator constituted by coiling stator windings over a stator core, said rotor comprising a pair of claw-type magnetic poles arranged in an opposed relation, a permanent magnet disposed between adjacent two of a plurality of claws provided on said pair of claw-type magnetic poles, and field windings coiled radially inward of said plurality of claws,

wherein an auxiliary magnetic pole plate contacting the whole of a magnetic pole surface of said permanent magnet is interposed between each of said plurality of claws and said permanent magnet.

8. A vehicular alternator according to Claim 7, wherein said auxiliary magnetic pole plate has a magnet holding portion for holding said permanent magnet.

9. A vehicular alternator according to any one of Claims 1 to 8, wherein a protective member is disposed at

least on the outer side of said permanent magnet in the radial direction of said rotor.